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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,522	08/01/2003	Ching Hian Hee	83377.0008	4355

26021 7590 10/04/2005

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EXAMINER

RICKMAN, HOLLY C

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,522

Applicant(s)

HEE ET AL

Examiner

Holly Rickman

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 24-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 7-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I in the reply filed on 7/7/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 24-40 are withdrawn from consideration as being directed to a non-elected invention.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 is rendered indefinite by the relative term "high saturation magnetization." The term "high saturation magnetization" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Thoma et al. (US 5569523).

Thoma et al. disclose a magnetic recording medium having a substrate, a first magnetic layer and a second magnetic layer wherein the magnetic layers have easy axes that are tilted with respect to the normal. The angles of the easy axes are acute with respect to the direction normal to the film surface (see col. 3, lines 43-50; col. 12, lines 58-64; col. 15, lines 12-36).

With respect to claim 5, the examiner takes the position that the structure taught by Thoma et al. inherently meets the limitation requiring biaxial orientation of the easy axes by virtue of the fact that the reference teaches the same structure and composition of layers as disclosed by Applicant (i.e. Co oxide). Thus, one of ordinary skill in the art would expect Thoma's structure to exhibit the claimed biaxial property in the absence of a showing to the contrary.

With respect to claim 6, one of ordinary skill in the art would understand that two magnetic layers disposed in contact with one another would exhibit exchange coupling.

7. Claims 1-3, 5-6, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugita et al. (US 5534324).

Sugita et al. disclose a magnetic recording medium having a substrate, a first magnetic layer and a second magnetic layer wherein the magnetic layers have easy axes that are tilted with respect to the normal. The angles of the easy axes are acute with respect to the direction normal to the film surface (see Fig 1; col. 2, lines 1-10; col. 4, lines 52-56).

With respect to claim 5, the examiner takes the position that the structure taught by Sugita et al. inherently meets the limitation requiring biaxial orientation of the easy axes by virtue of the fact that the reference teaches the same structure and composition of layers as disclosed by Applicant (i.e. Co oxide). Thus, one of ordinary skill in the art would expect Sugita's structure to exhibit the claimed biaxial property in the absence of a showing to the contrary.

With respect to claim 6, one of ordinary skill in the art would understand that two magnetic layers disposed in contact with one another would exhibit exchange coupling.

Allowable Subject Matter

8. Claims 7-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art to Thoma et al. and Sugita et al. fails to teach or suggest a recording medium having a perpendicular magnetic layer and a longitudinal magnetic layer.

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Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Li et al. (US 2005/0214585) and Gao (US 2004/0233578) are cited as art of interest.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Rickman whose telephone number is (571) 272-1514. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Holly Rickman', with a stylized flourish at the end.

Holly Rickman
Primary Examiner
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